Work Order ID 119253

119253

May-14-14 10:32:28 AM

Item ID: D4635-4 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Aft Ceiling Panel, RH

Start Date: 5/14/14 **Start Qty:** 1.00 *1* **Cust Item ID:**

Required Date: 5/14/14 **Req'd Qty:** 1.00 *1* **Customer:**

Reference:

Run Start *NR1*

Approvals: **Process Plan:** MLS **Date:** 14-05-14 **Tooling:** _____ **Date:** _____ **Stop** *NR2*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4635	**Revision Nbr** E								
100	HAND FINISHING THERMOFORMING	0.00							DAS 07 9-89
100 Thermoform	**Memo** Cut Blanks	0.00				x1			14/05/14
Thermoforming Machine									
105	Dry Material	0.00							DAS 07 9-89
105 HandThermo	**Memo** Dry Sheet as per QSI022 POLYCARBONATE	0.00				x1			14/05/14
Hand Finishing Thermoforming	Temp: 245 deg. F Time IN: 5:00 PM ~~6:00 AM~~ Time OUT: _____								

MAY 14 2014

Per.....

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 119253

119253

May-14-14 10:32:28 AM

Item ID: D4635-4 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Aft Ceiling Panel, RH

Start Date: 5/14/14 **Start Qty:** 1.00 *1*

Required Date: 5/14/14 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	THERMOFORMING MACHINE	0.00				X1			DAS 07 9-89
110									14/05/14
Thermoform	**Memo**	0.00							
Thermoforming Machine	Thermoform as per Dwg. D4635-4 and Folio FTA150								
	Dwg. Rev. E								
	Folio Rev. D								
	Visually inspect for proper formation and texture								
130	HAND FINISHING THERMOFORMING	0.00				X1			B 14/06/17
130									
Thermoform	**Memo**	0.00							
Thermoforming Machine	Trim to Finished Dimensions								
140	~~QC6- Inspect dimensions to drawing~~	0.00							DAS 16 9-89
140	Dimensional Inspection								14/06/18
QC	**Memo**	0.00							
Quality Control	Fill out Inspection Sheet Rev A								

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

May-14-14 10:32:34 AM

Work Order ID: 119253 *119253*

Parent Item: D4635-4 *D4635-4*

Parent Item Name: Aft Ceiling Panel, RH

Start Date: 5/14/14 **Required Date:** 5/14/14

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev. A New Issue 12/05/07 DL VERIFIED BY:JLM IPP Rev. B Dwg. Update 12/11/08 DL IPP Rev C Dwg. Update 13/07/09 DL IPP Rev. D Dwg, Update, Material Change 13/12/18 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-07		Purchased	No			100	sf	1,688.773	9.39 **	10			DAS 07 9-89

MLEXS.093-F6006-07

GE PLASTICS LEXAN SHEET

14/05/14

Location	Loc Qty	Loc Code	
MAT023	1688.77332		
114459	229.26		
123105	38		
124501	543.5		
m128668	600.68		10 sq ft
m129014	277.33332		

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

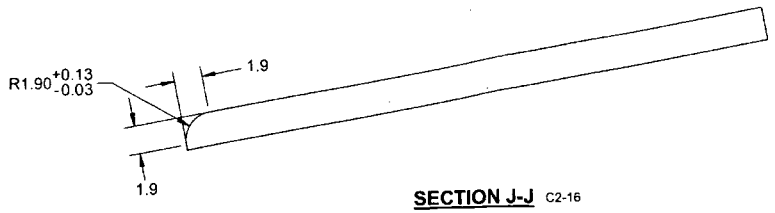
FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

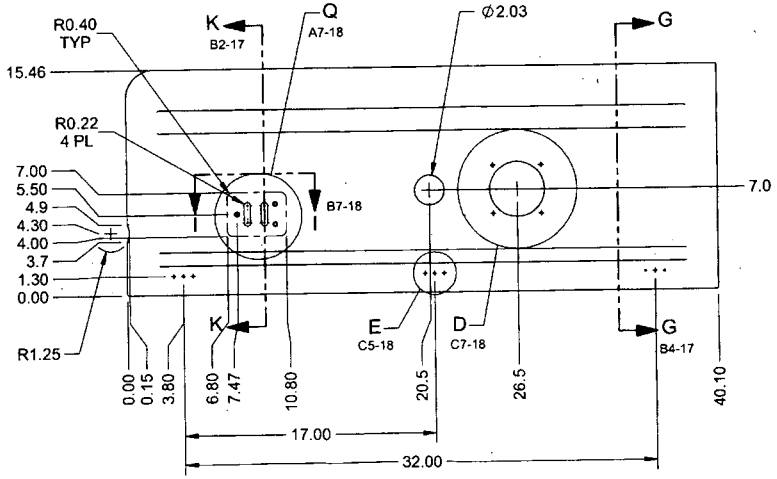
General

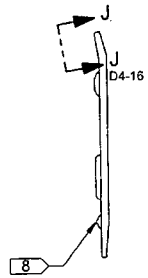
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
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☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
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☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



SECTION J-J C2-16

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 119253 MCJ
1405-14





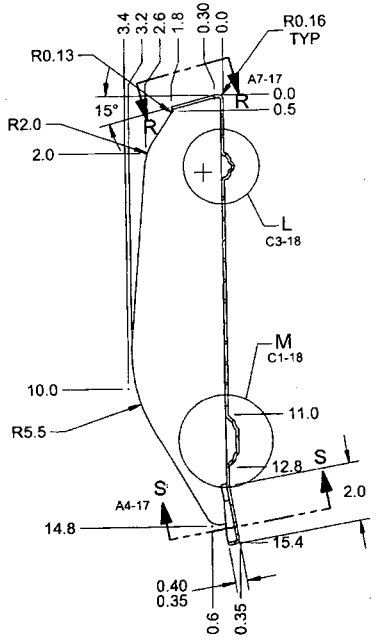
RELEASED
2014 -01- 22

D4635-4 RH, AFT CEILING PANEL

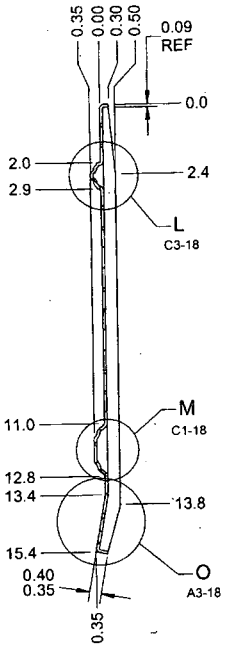
NOTES:
1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
(REF DART SPEC MLEXS.093-F6006-07)
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 2.66 lbs
8) TEXTURE ON THIS SIDE
9) TRIM D4635-4 PER TOOL DT9842
10) THERMOFORM D4635-4 PER QSI 022 USING DT9850 TOOL
MIN. THICKNESS AFTER FORMING:
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	DRAWING NO. D4635 REV. E
CHECKED		SHEET 16 OF 18
MFG. APPR.		TITLE OUTBOARD CEILING PANELS SCALE NTS
APPROVED		
DE APPR.		
DATE	14.01.09	

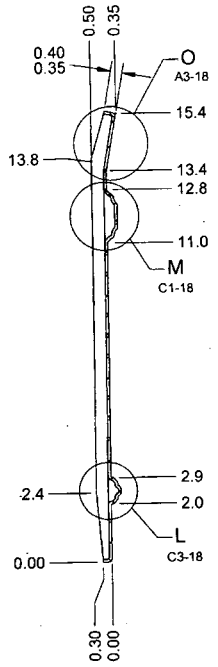
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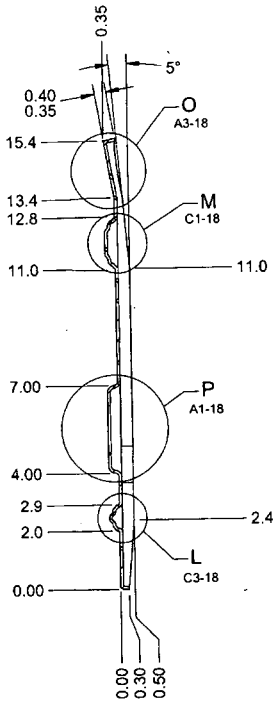
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SECTION A'-A' OPPOSITE B3-13 B3-14
SCALE 2X



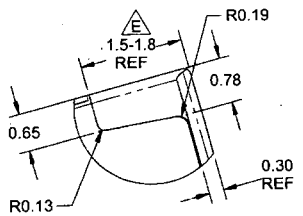
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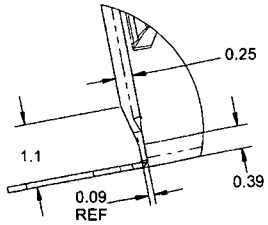
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SCALE 2X



SECTION K-K C6-16
SCALE 2X



AUXILIARY VIEW R-R
SECTION R'-R' OPPOSITE D7-17
SCALE 2X

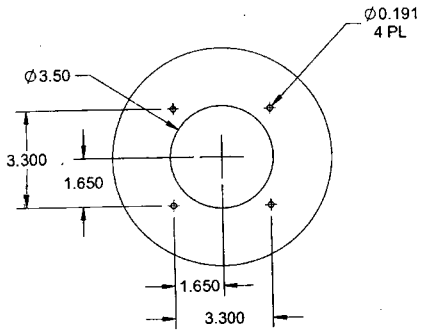


AUXILIARY VIEW S-S
SECTION S'-S' OPPOSITE B7-17
SCALE 2X

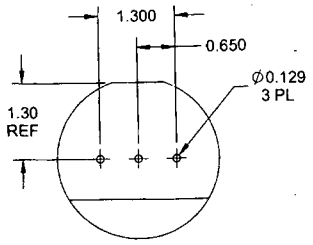
RELEASED
2014 -01- 22

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	DRAWING NO. D4635 REV. E
CHECKED	DC	SHEET 17 OF 18
MFG. APPR.		TITLE OUTBOARD CEILING PANELS SCALE NTS
APPROVED		
DE APPR.		
DATE	14.01.09	

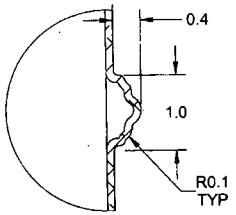
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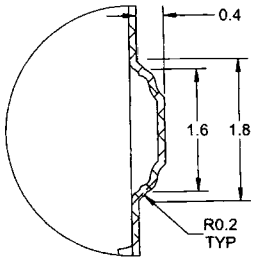
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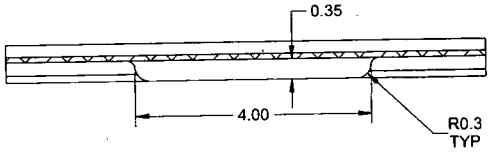
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SCALE 4X



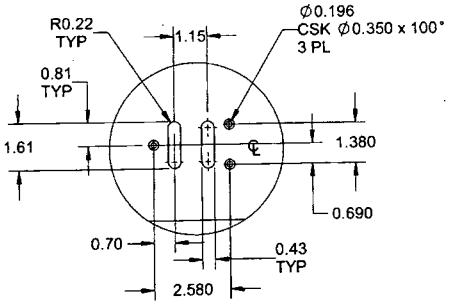
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SCALE 1.5X



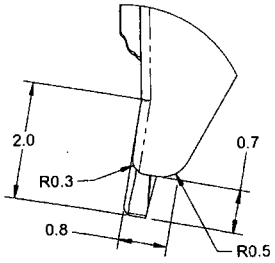
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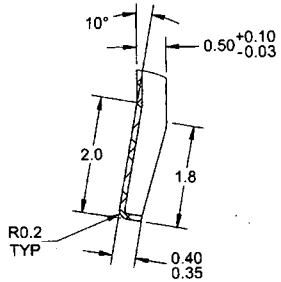
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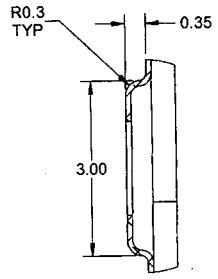
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DETAIL N B2-13
SCALE 2X



DETAIL O D2-17 D3-17 B5-17
SCALE 2X



DETAIL P C2-17
SCALE 4X

RELEASED
2014 -01- 22

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	DC	DRAWING NO. D4635 REV. E
MFG. APPR.		SHEET 18 OF 18
APPROVED		TITLE OUTBOARD CEILING PANELS SCALE NTS
DE APPR.		
DATE	14.01.09	

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DART AEROSPACE LTD

Description: Aft Ceiling Panel RW		**Work Order:**	119253
Inspection Drawing: 4635-4	**Rev:** E	**Part Number:**	D4635-4

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.80	+/-0.030	3.8	✓		Vern	SFAR-06
17.00	+/-0.030	17.00	✓		M-T	SFAD-21
32.00	+/-0.030	32.00	✓		"	
7.47	+/-0.030	7.47	✓		"	
20.5	+/-0.100	20.5	✓		"	
26.5	+/-0.100	26.5	✓		"	
7.0	+/-0.100	7.0	✓		"	
5.50	+/-0.030	5.50	✓		"	
Ø2.03	+0.012 -0.001	Ø2.03	✓		Vern	SFAR-06
3.300	+/-0.010	3.300	✓			
1.650	+/-0.010	1.650	✓			
3.300	+/-0.010	3.300	✓			
1.650	+/-0.010	1.650	✓			
Ø0.191	+0.005 -0.001	Ø0.191	✓			
Ø3.50	±0.010	Ø3.50	✓			
1.300	+/-0.010	1.300	✓			
0.650	+/-0.010	0.650	✓			
Ø.129	+0.005 -0.001	Ø.129	✓			
1.380	+/-0.010	1.380	✓			
0.43	+/-0.030	0.43	✓			
1.61	+/-0.030	1.61	✓			

Measured by: SAD **Date** 14/06/18	**Checked By:** DAS 16 9-89 **Date** 14/06/18	**QC inspector:** DAS 16 9-89 **Date** 14/06/18	**Engineering Approval** (*if necessary*): **Date**